

Remarks

The Office Action mailed January 10, 2005 has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-22 are now pending in this application. Claims 1-22 are rejected. Claims 1, 3, 5, 7, 8, 11-14, and 22 have been amended. No new matter has been added.

The rejection of Claims 1-22 under 35 U.S.C. § 102(b) as being anticipated by Dobbins et al. (U.S. Patent No. 5,790,546) is respectfully traversed.

Dobbins et al. describe a computer network and a secure fast packet switching (SFPS) network including a plurality of network infrastructures that are built up around a core switching fabric (column 3, lines 59-60). The switching fabric provides a plurality of physical paths or routes that allow users to send information to each other (column 3, lines 60-61). A networking chassis (30) is adapted to incorporate the SFPS technology (column 13, lines 34-35). The chassis is a mechanical enclosure (31) which is used to house a plurality of networking modules (32), which may include repeater modules, bridge modules, router modules, and terminal servers (column 13, lines 36-40). A module embodies an SPFS switch (40) which is linked to the module's host processor (41) by a pair of port interface links (42) for transfer of data (column 13, lines 55-59). Examples of bandwidth-limited, shared hardware resources implemented within the computer network include peripheral devices such as printers, scanners, memories, disk drives and backplane communication links.

Claim 1 recites a method for forming a network including a plurality of communication devices, a wire network for allowing a plurality of communication transmissions between the communications devices, and at least one connectivity device connected to the wire network, the method comprising the steps of "utilizing the connectivity device to perform a repeater function including regenerating a communication signal such that the distance between the communications device is extended; utilizing the connectivity device to perform a routing function including routing communication transmissions by the communications devices through the

wire network; and communicating, by a central processing unit located within the connectivity device, with a network hub device located within the connectivity device and a network switch device located within the connectivity device, wherein the network hub device performs a hub function including interconnecting the communication devices by bringing segments of the wire network together, and the network switch device performs a switching function including reducing communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network; and integrating, within the connectivity device, a first function set and a second function set, wherein the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function.”

Dobbins et al. do not describe or suggest a method for forming a network as recited in Claim 1. Specifically, Dobbins et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Dobbins et al. describe implementing a printer within a computer network. A description of implementing the printer within the computer network does not teach integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Dobbins et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 1 is submitted to be patentable over Dobbins et al.

Claims 2-6, 21, and 22 depend from independent Claim 1. When the recitations of Claims 2-6, 21, and 22 are considered in combination with the recitations of Claim 1, Applicants submit that Claims 2-6, 21, and 22 likewise are patentable over Dobbins et al.

Claim 7 recites a network system comprising “a plurality of communications devices configured to communicate with each other; a wire network configured to interconnect said communications devices and allow a plurality of communication transmissions between said communication devices; a network connectivity device connected to said wire network, said network connectivity device configured to: perform a repeater function including amplifying communication transmissions such that the distance between said communications device is extended; and perform a routing function including routing communication transmissions through said wire network; and a central processing unit located within said network connectivity device and configured to communicate with a network hub device located within said network connectivity device and a network switch device located within said network connectivity device, wherein said network hub device configured to perform a hub function including interconnecting said communication devices by bringing segments of said wire network together, said network switch device configured to perform a switching function including reducing communication collisions by providing communication transmissions from said communications devices with independent paths through said wire network, and said network connectivity device configured to integrate a first function set and a second function set, wherein the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function.”

Dobbins et al. do not describe or suggest a network system as recited in Claim 7. Specifically, Dobbins et al. do not describe or suggest the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set

includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Dobbins et al. describe implementing a printer within a computer network. A description of implementing the printer within the computer network does not teach the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Dobbins et al. do not describe or suggest the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 7 is submitted to be patentable over Dobbins et al.

Claims 8-13 depend from independent Claim 7. When the recitations of Claims 8-13 are considered in combination with the recitations of Claim 7, Applicants submit that Claims 8-13 likewise are patentable over Dobbins et al.

Claim 14 recites a network connectivity device comprising a central processing unit connected to a electronic storage device, a hub module, a switch module, a repeater module and a router module, the connectivity device connected to a wire network interconnecting a plurality of communication devices, the connectivity device configured to “utilize said router module to perform a routing function including routing communication transmissions through the wire network, wherein said connectivity device includes a central processing unit configured to communicate with said hub module located within said connectivity device and said switch module located within said connectivity device, said repeater module configured to perform a repeater function including amplifying communication transmissions to extend a distance between the communications devices, said hub module configured to perform a hub function including bringing segments of the wire network together, and said switch module configured to perform a switching function including reducing communication collisions by providing communication transmissions from the

communications devices with independent paths through the wire network, and said connectivity device configured to integrate a first function set and a second function set, wherein the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function.”

Dobbins et al. do not describe or suggest a network connectivity device as recited in Claim 14. Specifically, Dobbins et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Dobbins et al. describe implementing a printer within a computer network. A description of implementing the printer within the computer network does not teach the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Dobbins et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 14 is submitted to be patentable over Dobbins et al.

Claims 15-20 depend from independent Claim 14. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-20 likewise are patentable over Dobbins et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-20 be withdrawn.

The rejection of Claims 1, 7, 14, 21, and 22 under 35 U.S.C. § 102(b) as being unpatentable over Picazzo, Jr. et al. (U.S. Patent No. 6,006,275) is respectfully traversed.

Picazzo, Jr. et al. describe a plurality of networks and an integrated hub/bridge with redundant network transceivers (column 10, lines 9-11). The integrated hub/bridge is implemented within a Token ring network (column 10, lines 23-27). The bridge accepts all messages addressed to a plurality of devices on a local area network (LAN) (2) implementing an Ethernet protocol, and, using a plurality of physical data link protocols employed by the LAN relays the messages to the LAN (column 15, lines 17-20). The networks serve a purpose of connecting many different computers or terminals to each other, host computers, printers, and file servers so that expensive computing assets, programs, files and other data may be shared among many users (column 1, lines 18-25).

Claim 1 is recited above.

Picazzo, Jr. et al. do not describe or suggest a method for forming a network as recited in Claim 1. Specifically, Picazzo, Jr. et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Picazzo, Jr. et al. describe connecting many different computers or terminals to printers so that expensive computing assets, programs, files and other data may be shared among many users. A description of connecting many different computers or terminals to printers does not teach integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Picazzo, Jr. et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater

function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 1 is submitted to be patentable over Picazzo, Jr. et al.

Claims 21 and 22 depend from independent Claim 1. When the recitations of Claims 21 and 22 are considered in combination with the recitations of Claim 1, Applicants submit that Claims 21 and 22 likewise are patentable over Picazzo, Jr. et al.

Claim 7 is recited above.

Picazzo, Jr. et al. do not describe or suggest a network system as recited in Claim 7. Specifically, Picazzo, Jr. et al. do not describe or suggest the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Picazzo, Jr. et al. describe connecting many different computers or terminals to printers so that expensive computing assets, programs, files and other data may be shared among many users. A description of connecting many different computers or terminals to printers does not teach the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Picazzo, Jr. et al. do not describe or suggest the network connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 7 is submitted to be patentable over Picazzo, Jr. et al.

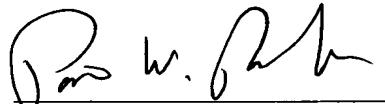
Claim 14 is recited above.

Picazzo, Jr. et al. do not describe or suggest a network connectivity device as recited in Claim 14. Specifically, Picazzo, Jr. et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Rather, Picazzo, Jr. et al. describe connecting many different computers or terminals to printers so that expensive computing assets, programs, files and other data may be shared among many users. A description of connecting many different computers or terminals to printers does not teach the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. Accordingly, Picazzo, Jr. et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a print function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. For the reasons set forth above, Claim 14 is submitted to be patentable over Picazzo, Jr. et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 7, 14, 21, and 22 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Patrick W. Rasche
Registration No. 37,916
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070